

INTERACTIVE DATA ENTRY AND ANALYSIS SYSTEM (IDEAS): The NNIS Surveillance Software

IDEAS is a DOS-based microcomputer software system that was developed by the Centers for Disease Control and Prevention (CDC) to simplify the transfer of nosocomial infection surveillance data collected by NNIS member hospitals to CDC. The data that are entered into IDEAS also remain at the hospital and are available for analysis at any time by the hospital's infection control program staff to meet their own needs. A commercial software package called PRODAS (Professional Data Analysis System) underlies IDEAS.



IDEAS is designed to facilitate the management and analysis of data collected using the protocols of the NNIS surveillance components. Surveillance personnel initially record demographic, risk factor, infection and laboratory data on the NNIS Infection Worksheet during ward rounds and then enter the data into the computer. The IDEAS infection data entry screens match the worksheet. As the information is entered, it is checked for valid codes and appropriate entries. Error messages are displayed on the screen. In addition to these edit checks, there are on-screen "Help" messages to assist the person entering the data with valid and acceptable codes.

Separate data entry screens are provided for summary data from each of the NNIS surveillance components. Summary data are used primarily for calculation of nosocomial infection rates.

Data analysis ranges from simple line listings and frequency tables to statistical analysis that compares the hospital's rates with aggregated NNIS data. The output can be printed on paper, displayed on the screen, or saved in a disk file where they can be edited with a word processing program. The most frequently used analytic tasks are available through menus, however, surveillance personnel may write their own programs using PRODAS. Data are transmitted to CDC by modem.

CDC provides ongoing user support to personnel in NNIS hospitals to ensure that high quality data are collected and submitted in a timely manner. Because IDEAS is best learned through hands-on training, two practitioners from each newly-enrolled NNIS hospital are required to attend the NNIS Surveillance and IDEAS Training Course, which is offered periodically at CDC in Atlanta. The IDEAS User's Guide, which is a comprehensive manual that accompanies the software, is provided to each NNIS hospital. Finally, personnel from NNIS hospitals are encouraged to contact the NNIS staff for consultation on questions related to using the NNIS surveillance components and IDEAS. There is no charge for training or user support.

MICROCOMPUTER HARDWARE AND SOFTWARE STANDARDS

Because the IDEAS software requires intensive computer processing, the Hospital Infections Program has set microcomputer hardware standards for surveillance in NNIS hospitals. It is the responsibility of the hospital to choose the specific microcomputer brand and model to purchase. Both the recommended and minimum standards are listed below. If you have any questions about these standards, please call the Services and Support Desk at (404) 639-6101.

	RECOMMENDED	MINIMUM REQUIRED
Computer	Pentium II-400 MHz or higher level 32MB RAM or higher 3.5" 1.44MB floppy drive Fixed drive 4 GB or higher	Pentium II-233 MHz 16MB RAM 3.5" 1.44MB floppy drive Fixed drive 1 GB
Monitor	Super VGA color monitor (800 x 600 or higher)	Super VGA color monitor (800 x 600)
Operating System	Windows 95/98 or Windows NT 4.0	DOS 6.22 or higher
Modem	US Robotics Sportster 56K data/fax modem (Part No. 1787 PC)	US Robotics Sportster 33.6/28.8 v.34 data/fax modem (Part No. 000840-0)
Printer	Laser printer	Laser printer
Telephone line	Dedicated analog phone line	Dedicated analog phone line
Internet access	Network browser	Network browser
E-mail access	NNIS primary contact person's own e-mail address at the hospital	NNIS primary contact person's own e-mail address at the hospital
Software	IDEAS§ PRODAS v3.2§ (Do not used PRODAS v4.0)	IDEAS§ PRODAS v3.2§ (Do not use PRODAS v4.0)
Word Processing Software	Corel WordPerfect 8.0 or MS Word97	ASCII

§ Provided by CDC without charge only to NNIS member hospitals.